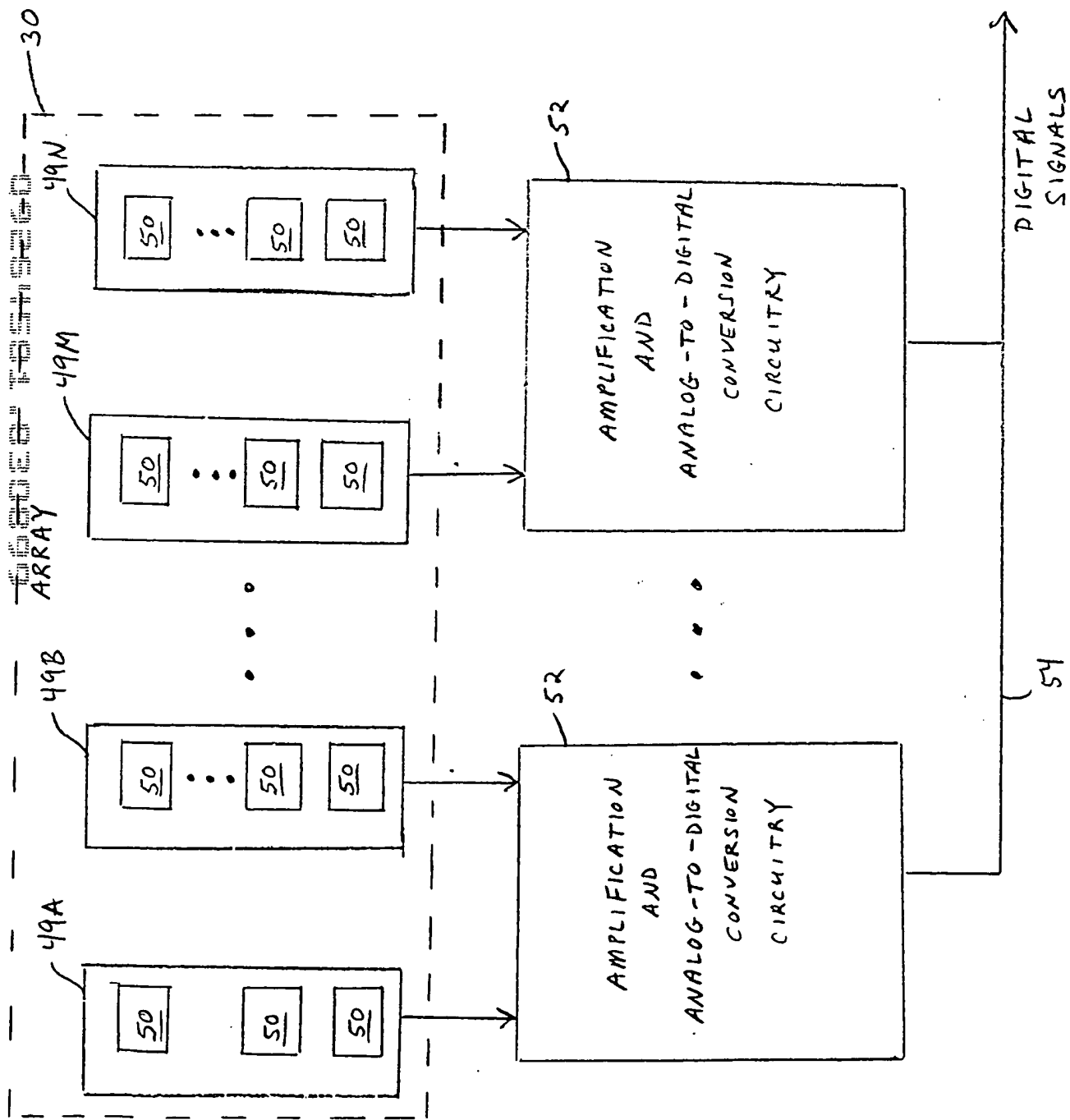


FIG. 1



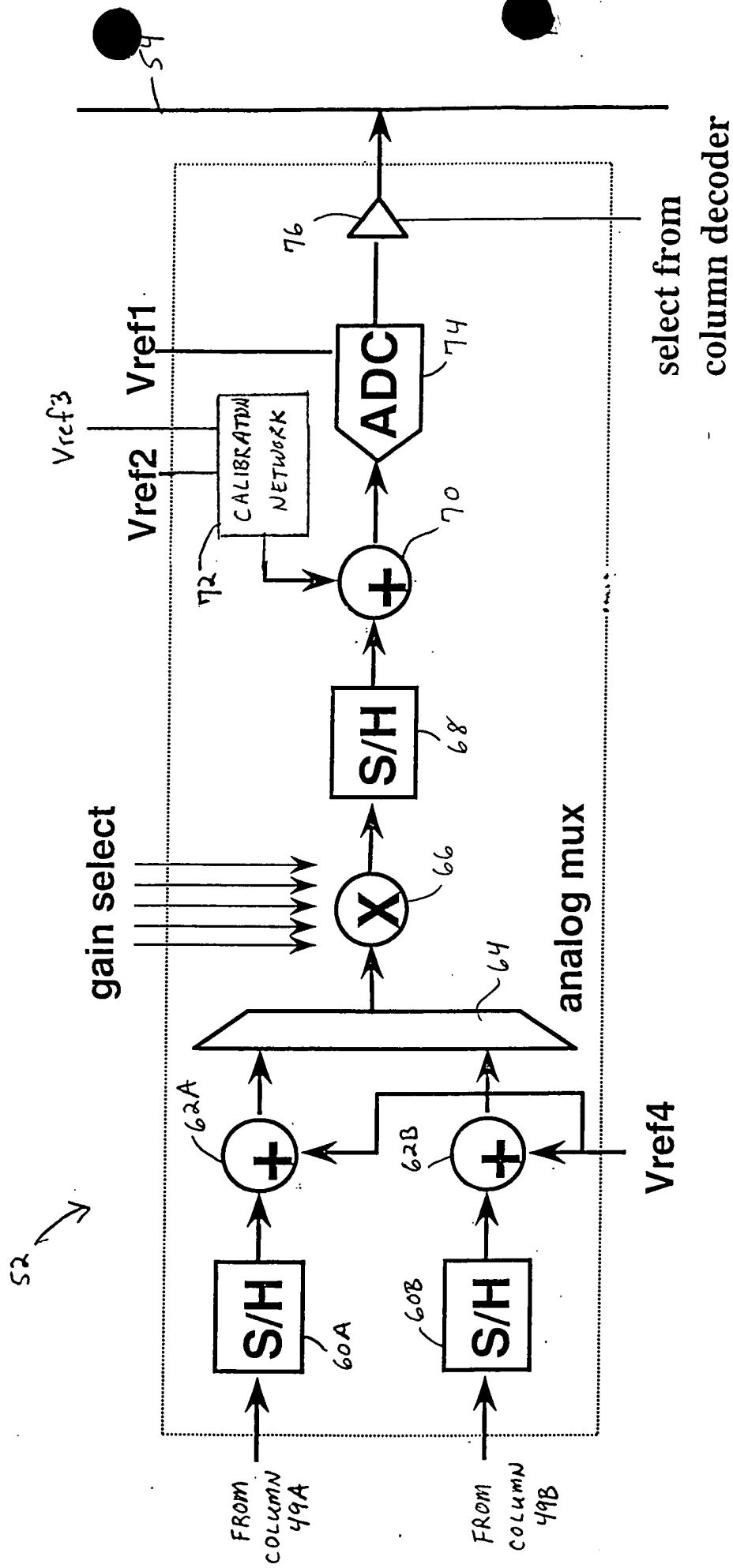


FIG. 3

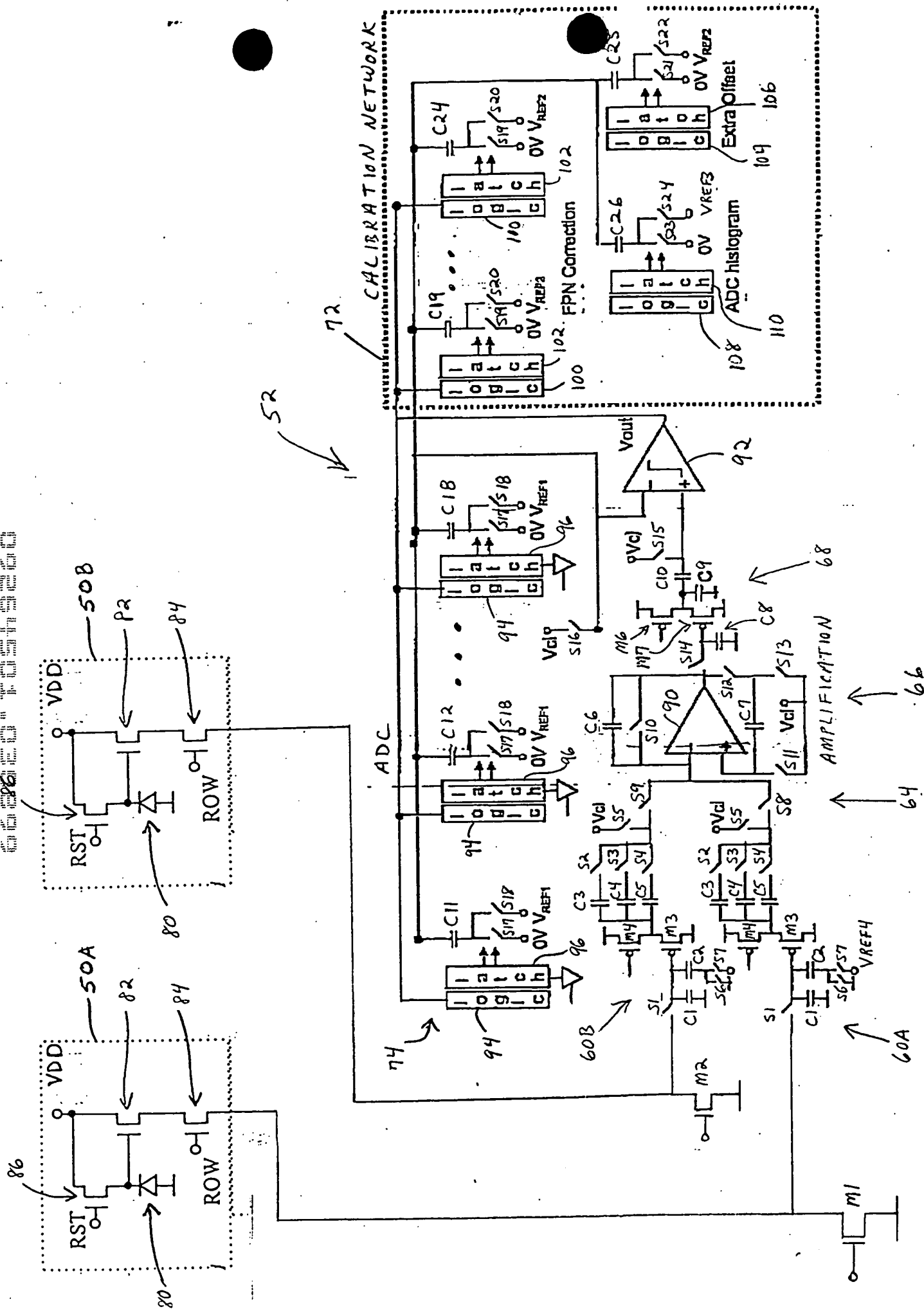
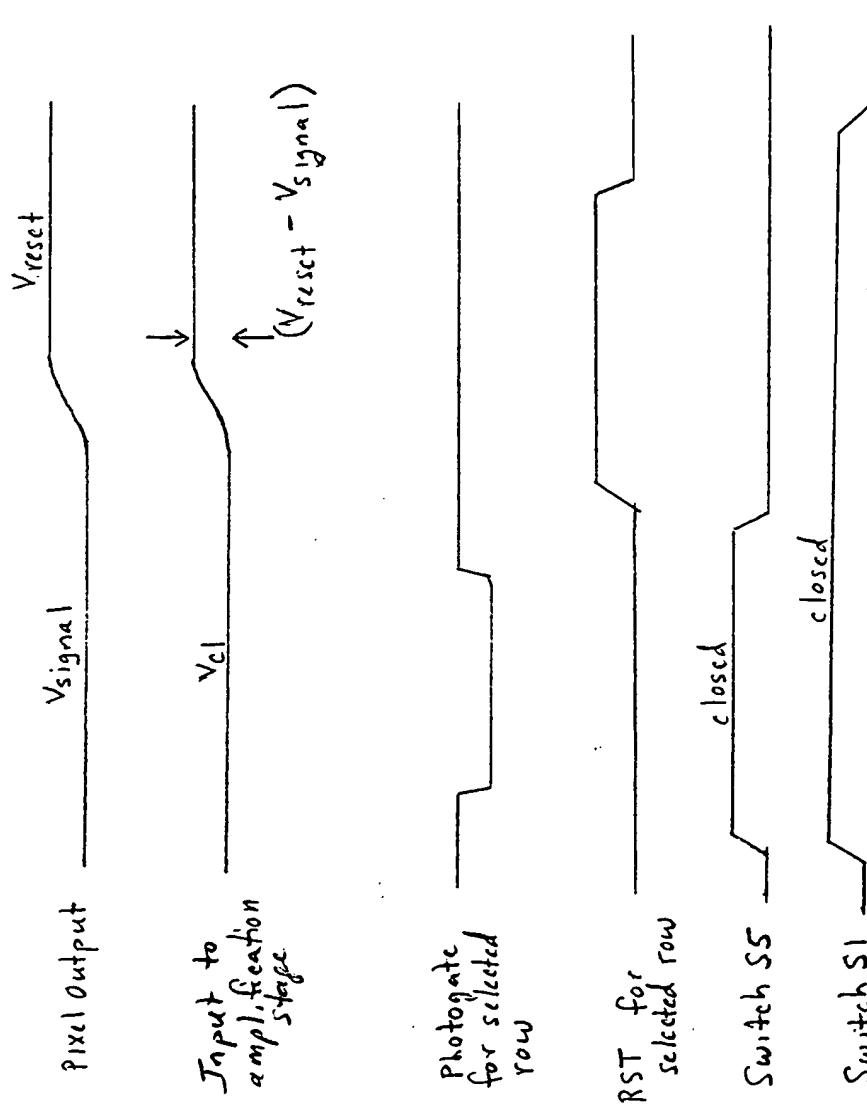


FIG. 4



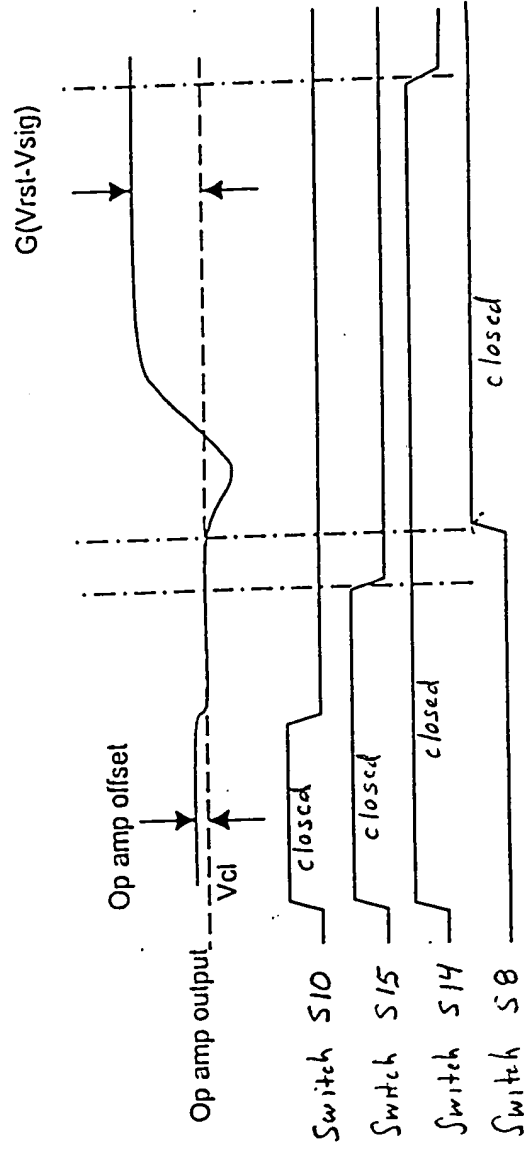
SAMPLE AND HOLD TIMING

FIG. 5

1



Fig. 6



Amp lification Timing

FIG. 7

92

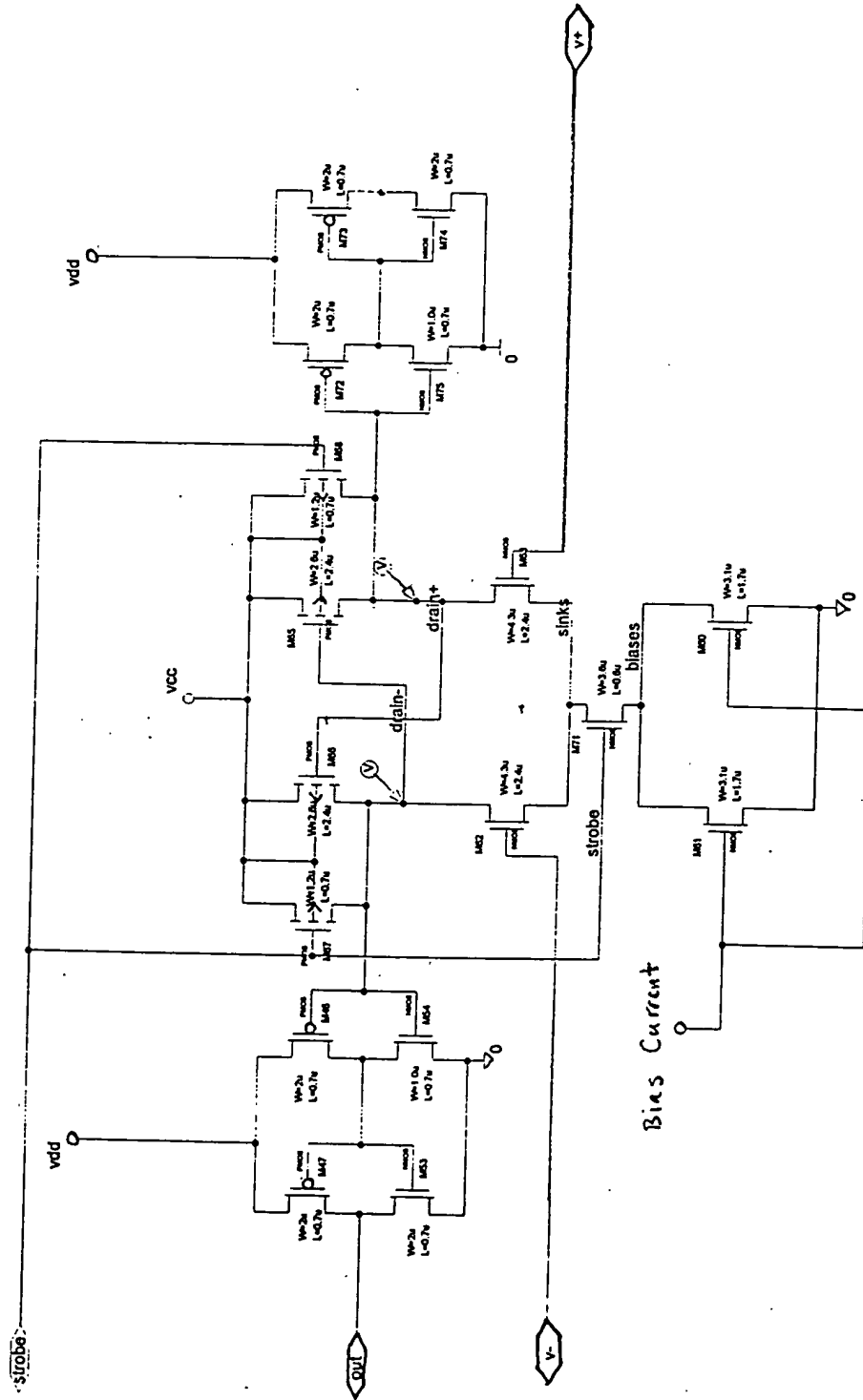


FIG. 8

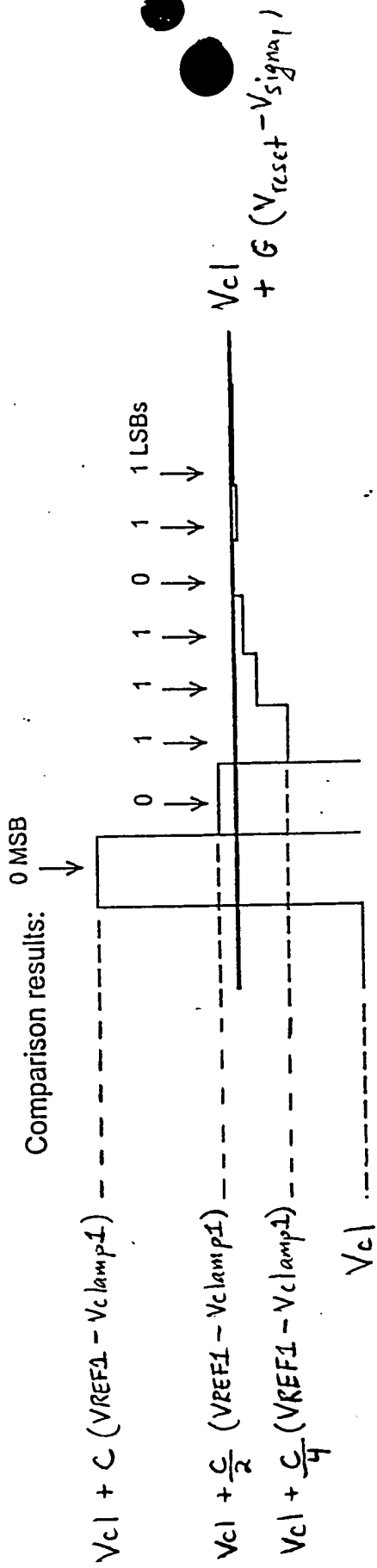


FIG. 9

To negative terminal
of comparator q2

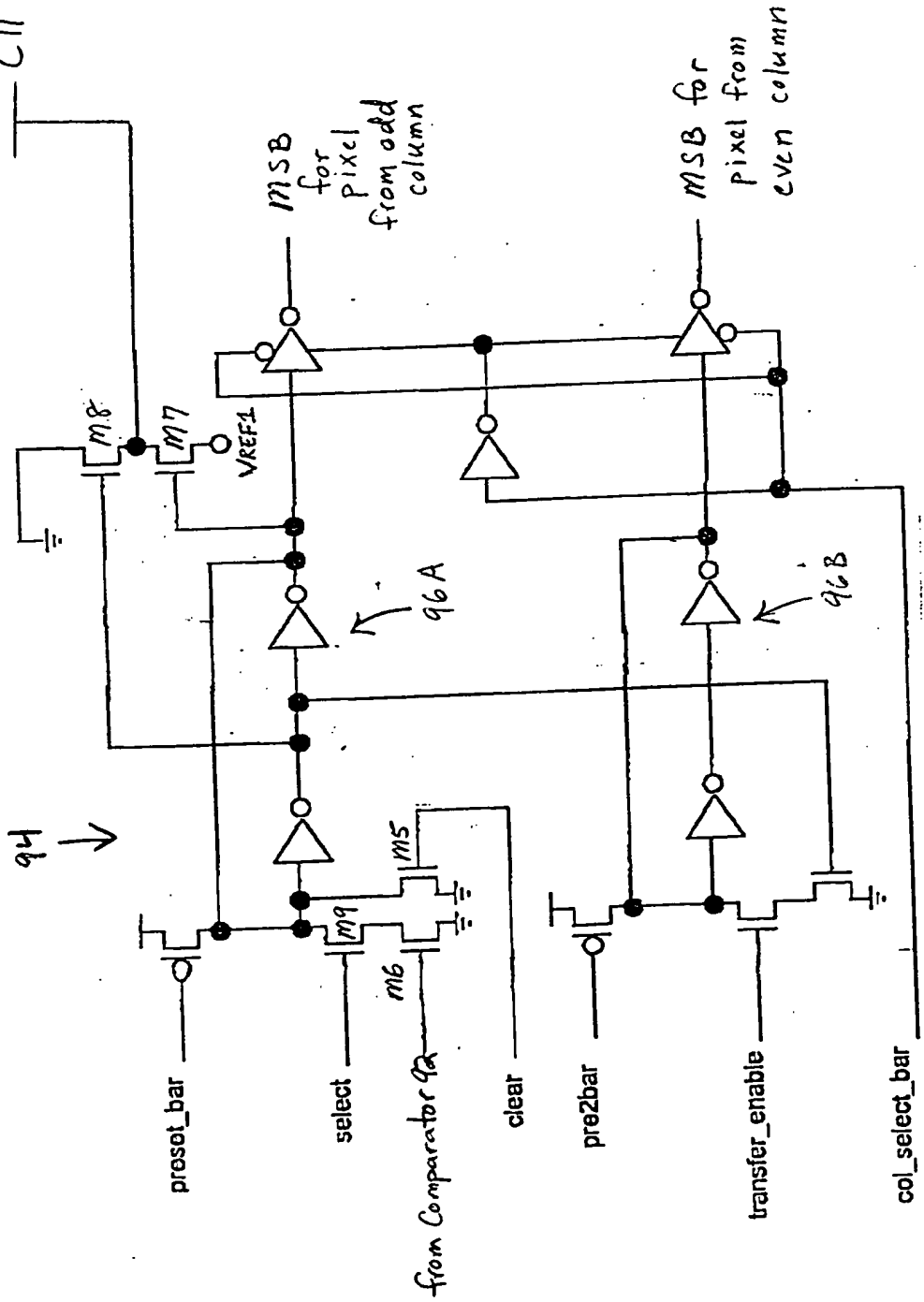
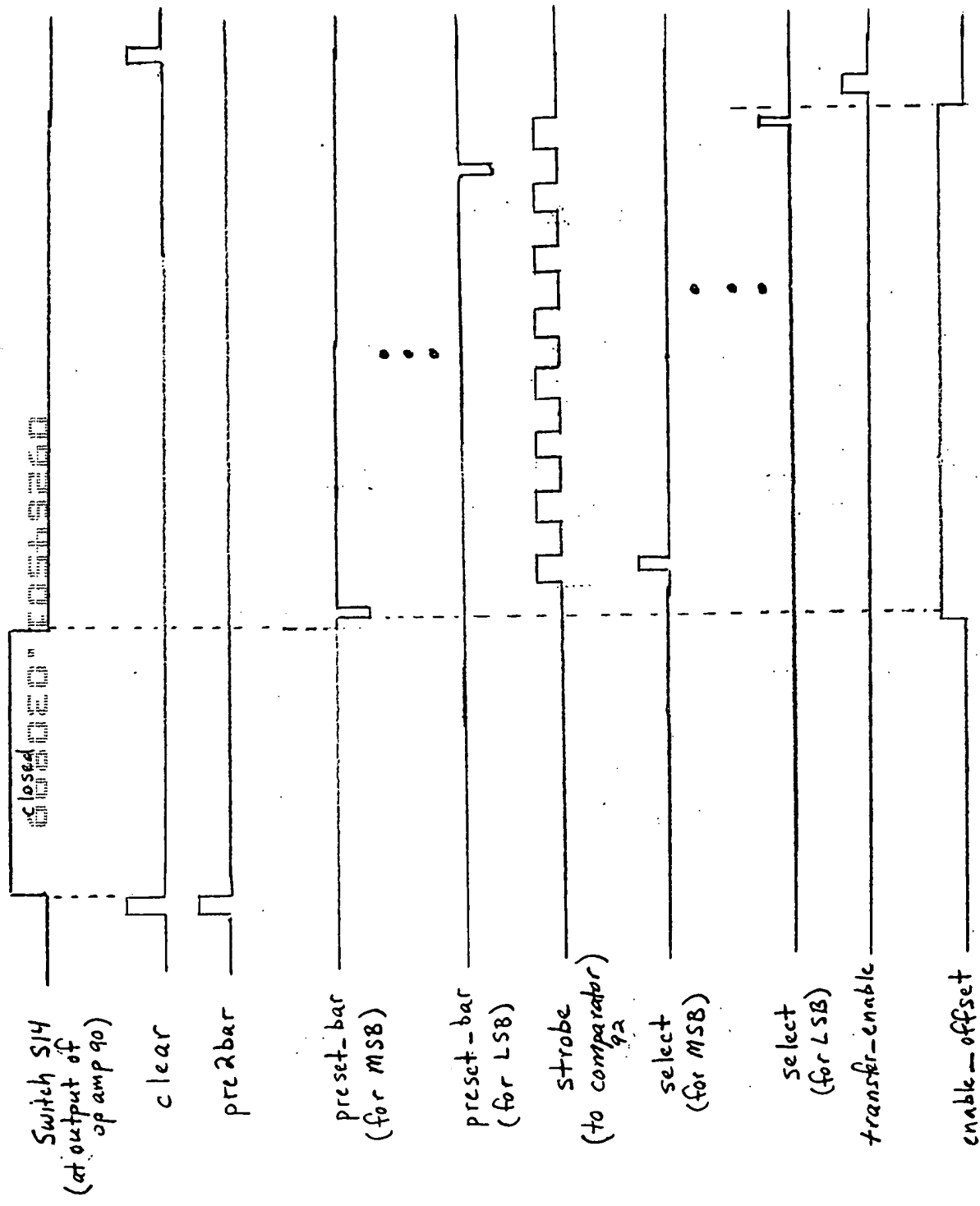


FIG. 10



← AMPLIFICATION → ANALOG-TO-DIGITAL CONVERSION →

FIG. 11

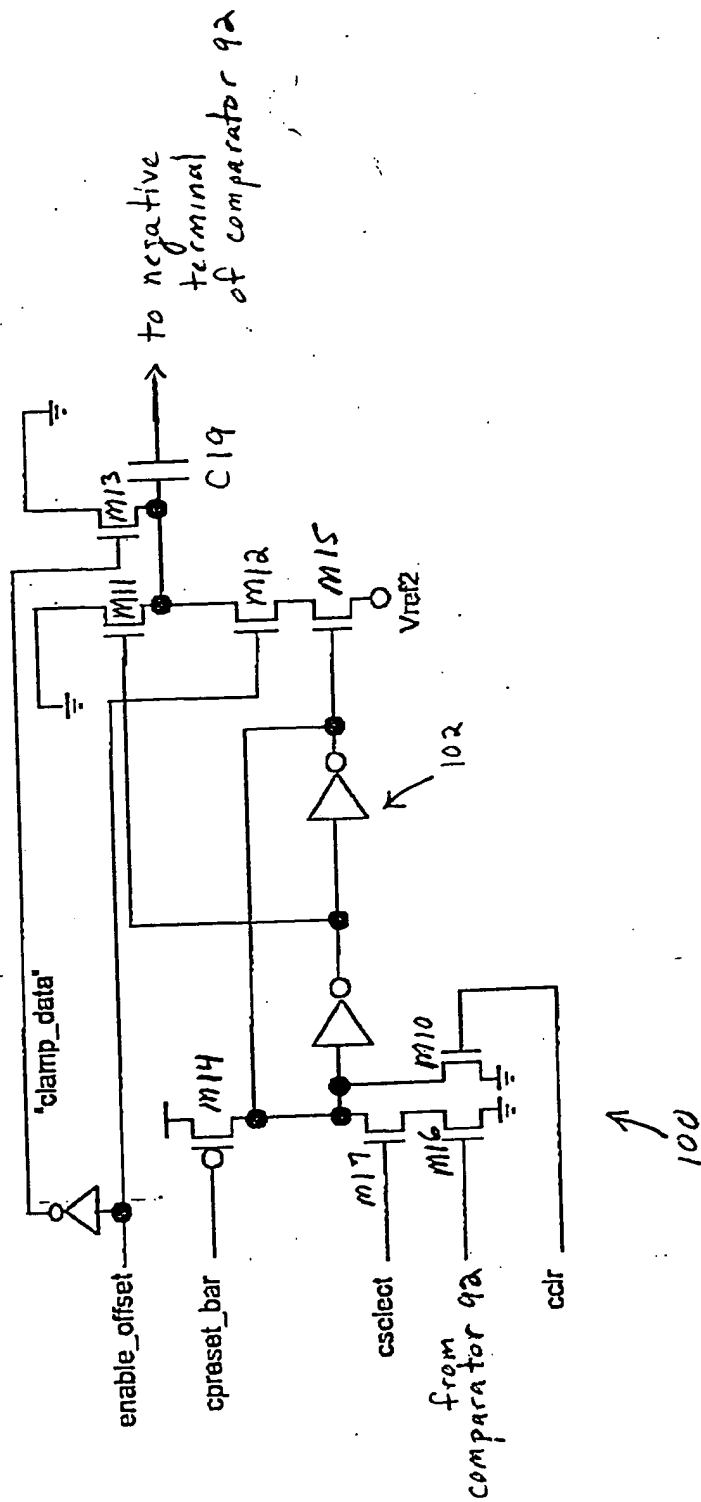
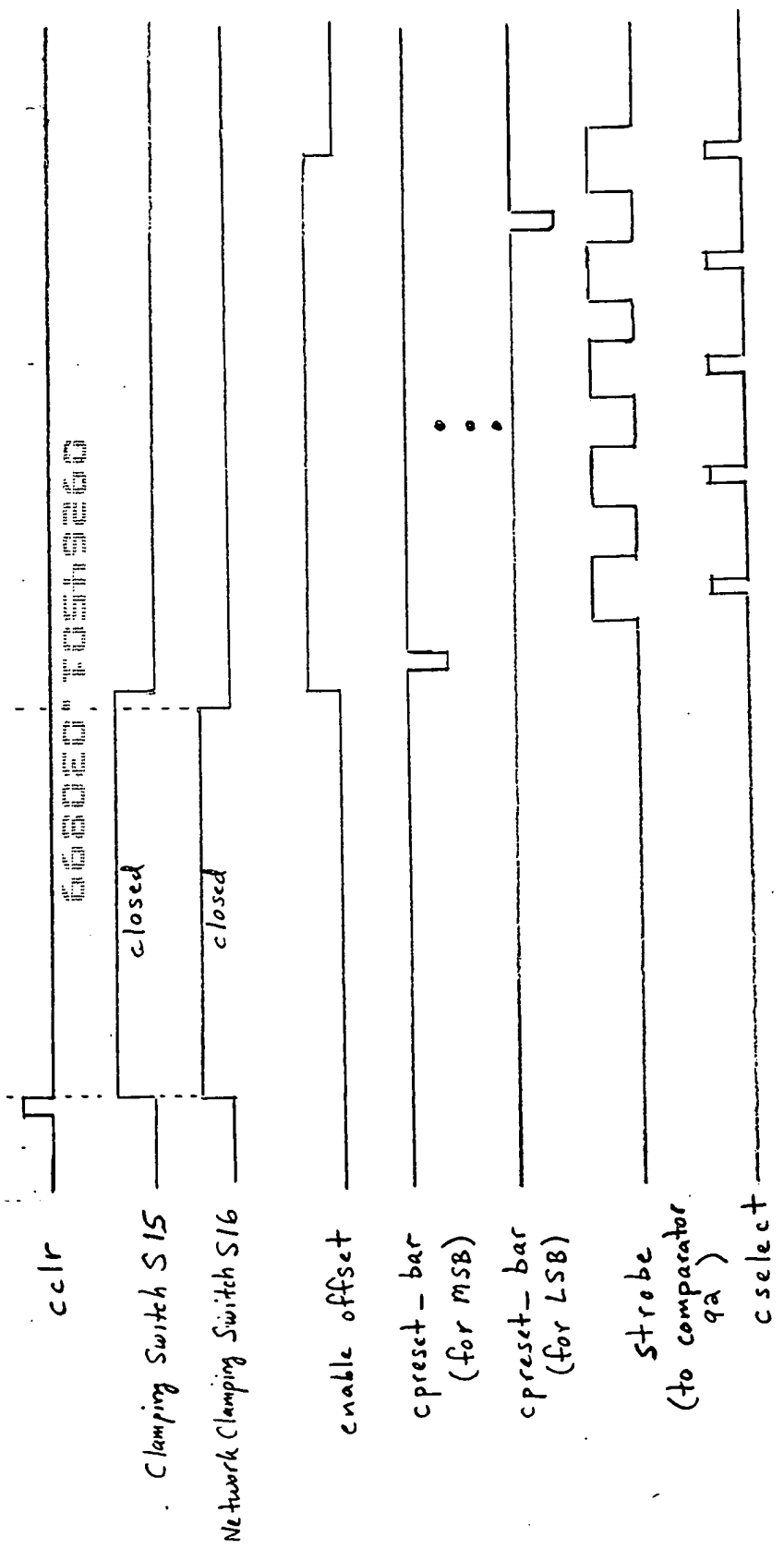


FIG. 12



CALIBRATION TIMING

FIG. 13

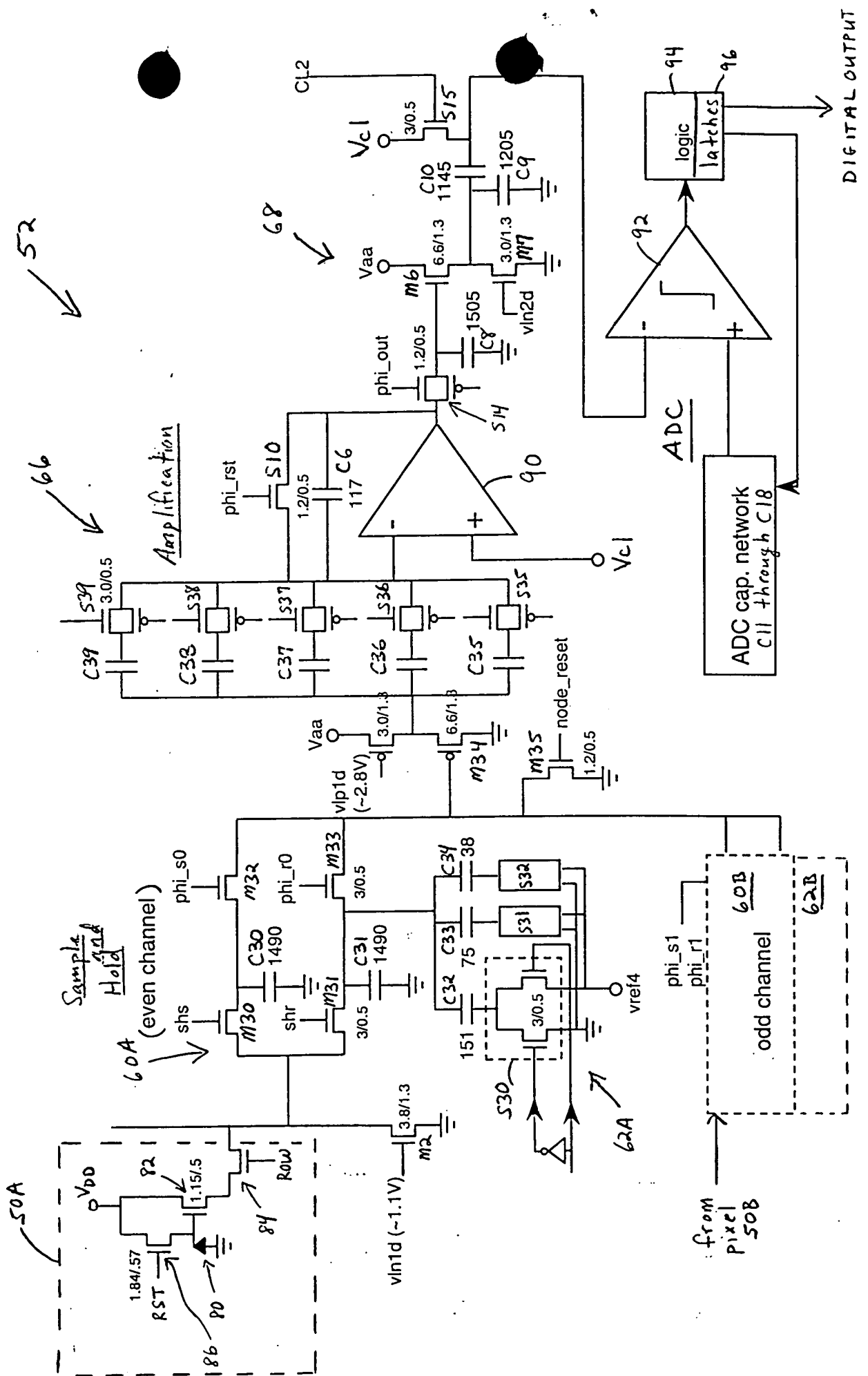


FIG. 14

pixel timing

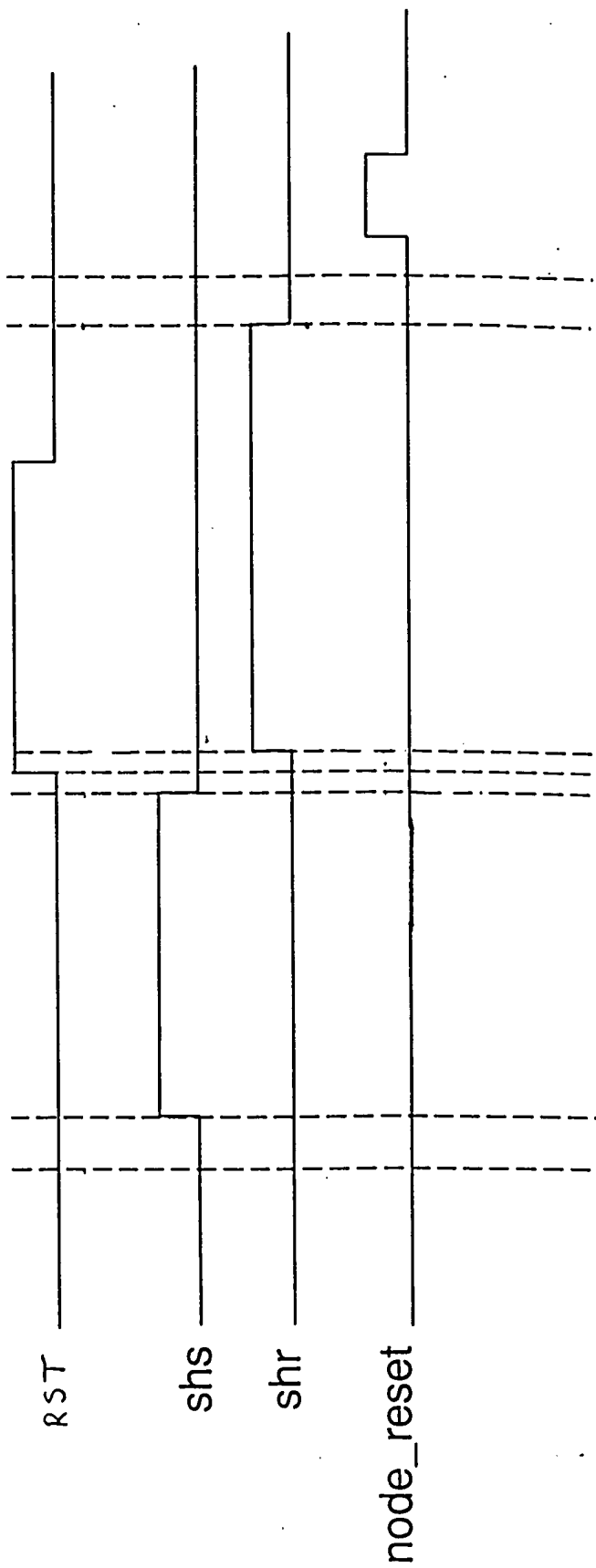


FIG. 15

gain timing

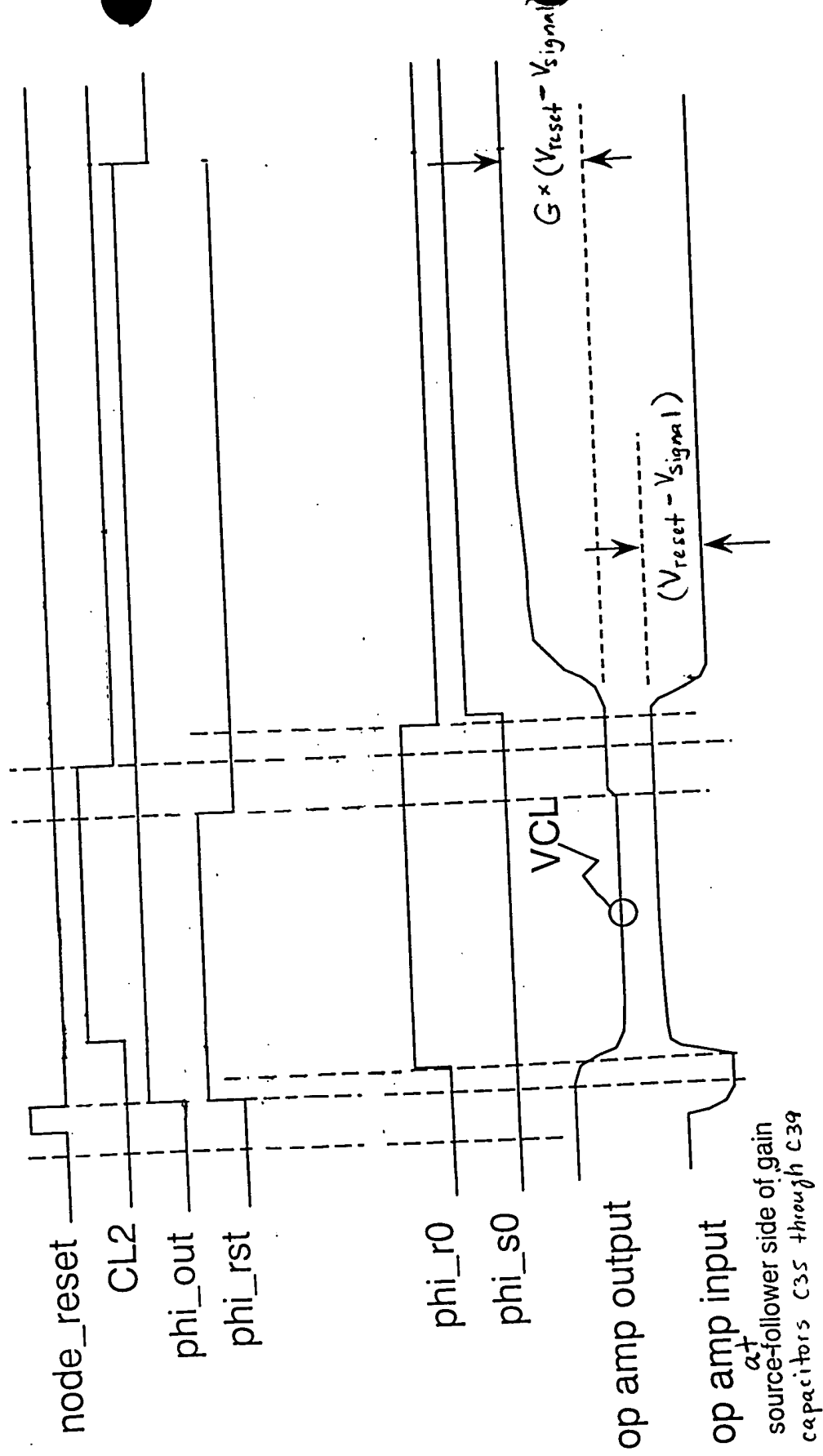


FIG. 16